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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Date

Inventor: Christopher W. Gabrys )  
Serial No.: 09/977,678 ) Group Art Unit: 2834  
Filed: Oct. 15, 2001 ) Examiner: Dang D. Le  
Title: "Improved Inductor Alternator Flywheel System"

October 21, 2003

Request for Reconsideration of Restriction RequirementCommissioner for Patents  
Alexandria, VA 22313-1450

Sir;

Responsive to the Office Action dated July 15, 2003, wherein the Examiner made his Restriction Requirement final, Applicant respectfully requests reconsideration of the Restriction Requirement for the following reasons:

**Discussion**

The Examiner asserts in his Restriction Requirement that the inventions of Groups I-IV are distinct, each from the other, because they are related as subcombinations disclosed as usable together in a single combination, but are distinct from each other because they are "separately usable". The Examiner defines the "separate utility" as follows:

Group I (claims 1-18) drawn to "the apparatus of the flywheel system with mechanical bearings". Separate utility: used to support a rotor rotation.

Group II (claims 19-25, 39-40) drawn to "the apparatus of a flywheel system with a controller". Separate utility: used to control the alternator output.

Group III (claims 26-29, 33-36 and 41) drawn to the apparatus of a flywheel device". Separate utility: used to generate electricity.

Group IV (claims 30-32, 37 and 38) drawn to the apparatus of a flywheel system with magnetic bearings". Separate utility: used to support a rotor rotation without contacting.

Applicant contends that the Examiner's characterization of the four Groups is incorrect, and that the "separate utilities" are in fact separate functionalities of a single invention.

Group I, characterized as drawn to "the apparatus of the flywheel system with mechanical bearings", actually should have only claims 11 and 12 in it, since those are the only claims that specifically mention mechanical bearings. Also, Group I contains claims directed to the "separate utility" of Group III.

Group II, characterized as drawn to "the apparatus of a flywheel system with a controller", also contains claims directed to the "separate utility" of Groups III ("used to generate electricity"). Moreover, the "separate utility" of Group II is not unique to Group II: claims 31 and 32 from Group IV also claim power control.

Group III, characterized as drawn to the apparatus of a flywheel device, having a separate utility of being used to generate electricity, should include all the other claims in the application since they all that that same "separate utility".

Group IV, characterized as drawn to the apparatus of a flywheel system with magnetic bearings having a separate utility of being used to support a rotor rotation without contacting, should also include claims 11 and 12 from Group I.

In support of his Restriction Requirement, the Examiner states that "claims 19 and 20 of Group II, for Example, do not recite any features contained in claims 1-18." This is clearly not the case, as can easily be seen by a cursory look at the claims in question. For example, the following comparison table lists the features of claims 19 and 20, and the features of claims 1-18.

Item	Claims 19 & 20	Claims 1-18
A.	An apparatus for providing emergency power in the event of disruption in power from a primary power source coupled to an output	An inductor alternator flywheel system
B.	a rotatable mass that stores kinetic energy	a rotatable member mounted on bearings for rotation about an axis, said member including a flywheel rotor.
C.	<p>a brushless generator having a pair output leads, said leads being coupled to said output, and at least one field coil, said generator being coupled to said rotatable mass such that kinetic energy from said mass is converted to electrical energy and delivered to said leads when said field coil is energized;</p> <p>said field coil being sufficiently energized when said primary power source is operational such that loss of said power does not require a rapid increase in power to said field coil to prevent a period of disruption in output power.</p>	<p>an inwardly facing radial surface forming a plurality of protrusions extending radially inwardly;</p> <p>a non-rotating member having a source of homopolar flux, said flux creating magnetic poles in said protrusions;</p> <p>at least one cylinder having an outer radial surface, said cylinder being mounted concentric with respect to said rotor and spaced apart radially from said protrusions such that an armature air gap is formed between said protrusions and said outer surface, said cylinder being constructed of substantially high permeability material; and</p> <p>at least one armature coil mounted within said air gap such that said flux induces an alternating voltage in said armature coil when said rotor rotates about said axis.</p>

These features are not claimed in the same words, but they all cover the same subjects.

Applicant believes that the "separate utilities" listed by the Examiner are not separate utilities at all, they are merely various functions that are performed by the disclosed embodiments of the flywheel system in the course of performing its stated function of storing and retrieving electrical power. All four groups of claims identified by the Examiner claim a flywheel system. They all have the same utility: storing energy in the form of rotational inertia of a flywheel, and delivering it back again when needed in the form of electric power. The disclosed embodiments all have the various types of the same functional elements, but the invention is claimed differently in the several claims, including omission of some of the functional elements to focus

on other combinations of other functional elements that make the invention what it is. Nevertheless, Applicant is not aware of any requirement that every claim have all the elements of every other claim to avoid a restriction requirement based on "separate utility."

The only difference in the Examiner's characterization of groups I and IV is that one has mechanical bearings and the other has magnetic bearings. In fact, some of those claims (11 & 12) include both mechanical and magnetic bearings. In any case, the use of mechanical or magnetic bearings does not constitute a "separate utility". They are both flywheel systems. They may be separate species, and a requirement for election of species may be appropriate if the Examiner believes that flywheel systems with mechanical bearings and similar flywheel systems with magnetic bearings are patentable over each other. But to say that the different types of bearings in similar flywheel systems give them "separate utility" is elevate the term "separate utility" to the point of meaninglessness. If these claim groups can be considered to have "separate utility", then it would be hard to imagine any two independent claims that are not identical that would not also have "separate utility."

Claim 1 is not restricted to mechanical bearings as the Examiner suggests. It claims bearings generically. Mechanical bearings are not claimed specifically in any claim in Group I until claims 11 and 12, and claims 11 and 12 also claim a magnetic suspension for the majority of the weight of the rotor. Thus, for at least claims 1-10 and 13-18, there is no basis for the distinction asserted by the Examiner, and for claims 11 and 12, there is still no basis for any distinction.

Where the claims of an application define the same essential characteristics of a single disclosed embodiment, restriction should never be required. MPEP 806.03. In this application, claims 1, 2, 5-10, 13, 15, 16, 19-29, 33, 39 and 40 (including claims from all four Groups) cover all the complete embodiments of Figs. 1-16, 18 and 19. Thus, there should be no basis for requiring restriction between any of those claims.

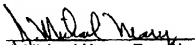
Applicant suggests that, if the Examiner really believes that that the claims in this application are properly subject to a restriction requirement, the proper characterization of them would be that they are "independent", rather than "distinct", because they are drawn to species (i.e. Figs. 12, 13, 14, 15, 16, 18 and 19) under a genus. See MPEP 802.01. If this is indeed what the Examiner intended to do, Applicant is prepared to deal with a requirement for election of species. However, that is not what the Examiner did. Applicant believes that the Restriction Requirement issued by the Examiner is improper under PTO Rules.

Thus, Applicant believes that there is no basis for asserting that the claims in this Application define four separate inventions. Applicant believes that there is in fact only a single invention, which is claimed in various ways, as is permitted. Applicant does not believe that every claim must contain all the elements of every other claim to avoid the assertion that the invention defined in the several claims all have "separate utility."

Applicant respectfully solicits an examination of all the claims in this Application.

Respectfully submitted,

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